PowerRIP 2000 Pro & LF User's Guide for Macintosh

Professional Proofing Software for Ink Jet Printers

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Chapter 1 - Introduction

PowerRIP 2000 turns your ink jet printer into a PostScript® Level 3 compatible printer. PowerRIP 2000, a software raster image processor (RIP) for the Macintosh® computer, reads and interprets PostScript 3 and allows your printer to print color raster images.

PostScript is the standard for high quality graphic output. All elements of a document, including text, graphics, and images are described by the PostScript code. When you print from an application, such as PageMaker,® PowerRIP

PowerRIP 2000 Features

- PostScript Level 3 compatible
- Mac USB, USB to parallel, and Ethernet support for most printers
- ColorSync support
- Accepts User Defined ICC Profiles
- ICC profiles for the printers inks and papers as well as iProof Systems'PressProof stock, at all available resolutions
- User definable spot colors and color calibration controls
- Makes composites from separations
- DCS1 and DCS2 support
- Prints Acrobat PDF and EPS files by dropping into printer queue
- Override printing options embedded in PostScript files
- Network ready, Server/Client and cross-platform configurable
- SWOP, Euro, and Toyo color simulation for more accurate offset press proof color matching
- Chooser level printer selection on the Macintosh platform
- Disc Cache
- PowerRIPPDF
- RGB Warning
- Print to multiple printers
- Pantone support

Where to get help

For helpful hints and troubleshooting guidelines, see Chapter10. If you need further assistance, technical support is available from iProof Systems.
When calling for technical assistance, be ready to identify your system and its configuration, the product code of PowerRIP 2000, and a description of the problems you are encountering. It is highly recommended that you enable the Log Messages option when creating a PowerRIP 2000 printer. The entries in the log will help the support staff identify PostScript error messages.

iProof Systems Technical Support

iProof Systems Technical Support is available through phone, fax, mail, e-mail and the Internet. Hours of operation are 9:00 am to 6:00 pm EST (Monday through Friday). Free telephone support is limited to 30 days after your first support call. After 30 days from your first call, a charge of $25.00 (U.S. Dollars) applies per incident (billed to your credit card). Visa, MasterCard and American Express are accepted. We suggest using iProof's free e-mail support to get a prompt answer to any questions you may have.

iProof Systems
1790 Highway A1A, Suite 204
Satellite Beach, FL 32937 USA
Telephone Support: (321) 777-3982
Fax Support: (321) 777-6025

Electronic Support Services

- **World Wide Web**
  iProof Systems' World Wide Web site is http://www.iproofsystems.com. iProof Systems'home page includes FAQs (Frequently Asked Questions), new product announcements, Error Messages, Read Me files, and other helpful information.
- **iProof Systems E-Mail Support**
  You can also send e-mail to iProof Systems at Support@iProofSystems.com. Please include your name, PowerRIP 2000 Product Code, platform, and printer model so that iProof Systems technical sup port representatives can e-mail a response to your question.

Chapter 2 - Installing PowerRIP 2000

2000 processes the PostScript code and sends the processed image to the printer.
Installation consists of the following steps:

1. Connect your printer to your Macintosh.
2. Install the PowerRIP 2000 software.
3. Validate PowerRIP 2000.

Before you install PowerRIP 2000, make sure your Macintosh meets the system requirements which can be found in PowerRIP System Requirements, this manual.

Installing the PowerRIP 2000 Software

Follow the instructions below for the type of installation you want: PowerRIP 2000 Full Install (All Printers), Custom Install, or Client Install. Select Full Install to install the software for all the printers supported by PowerRIP 2000 or Custom Install to install the software for only the printers you have.

Install PowerRIP2000

Follow these steps:

1. Turn off all virus protection programs before you install the software. If you do not know how to do this, see your virus protection or Macintosh documentation.
2. Make sure your printer is turned on.
3. Reboot your Macintosh.
4. Go to the Chooser and click the AppleTalk Active button.
5. Insert the PowerRIP 2000 CD-ROM into the CD-ROM drive.
6. Double-click the **PowerRIP 2000 installer** icon.

The **Select a Language** dialog will display.
Type your Product Code. All caps should be used.
Click **OK**.

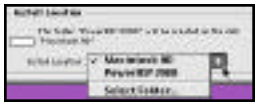
NOTE: US and Canada must select US and Canada Only English as the language. Those client with Euro software must choose any language other then US **English**

7. The PowerRIP 2000 splash screen will display.
Click **Continue**.

8. The End User License Agreement dialog display.
Click **Accept**.

9. The PowerRIP 2000 Installer will display. Use the Custom Install pull-down to select Full Install if you want to install PowerRIP 2000 for all printers.
If you wish to Custom Install for your printer(s) only, click on the arrow (▸) to the left of Custom Install to open, and select your printer(s).

The default is to install the PowerRIP 2000 files in the PowerRIP 2000 folder on your startup hard drive. If you want to install the files else where, change the destination.
Click **Install**.



10. The PowerRIP Installer dialog will display and PowerRIP 2000 will install.

The program installs all files necessary to run PowerRIP 2000. Most files are copied to the folder you specified, but the PPDs are copied to the System Folder>Extensions>Printer Descriptions folder.

11. When the installation is complete click **Quit**.
12. Eject the PowerRIP 2000 CD. You may enable your virus protection software at this time.

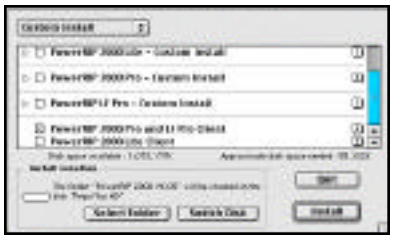
13. Omit this step if you have a USB stand-alone configuration. In the Apple menu, select Control Panels, then select AppleTalk. For Ethernet Network connections, select Ethernet. For serial connection select Remote Only.
14. Close the window and Save the configuration.

You have completed the PowerRIP 2000 client software installation. You must now validate PowerRIP 2000. If you want to use the Pantone or ColorSync color matching system, see Color Matching, this manual. If you want to print to PowerRIP 2000 from networked Macintosh computers, see Client Installation, this manual. Otherwise, continue with validating PowerRIP 2000 and then Chapter 3, Getting Started.

Client Install

For a PowerRIP 2000 client installation, follow the steps 1 through 8 of the Custom Install directions.

9. The PowerRIP 2000 Installer will display. Select Client Install. Click **Install**.

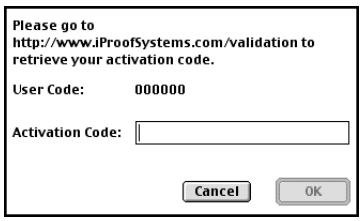


Follow steps 10 through 14 to complete the install.

Validating PowerRIP 2000

Before using PowerRIP 2000, you must validate your copy of the software on your standalone or print server Macintosh. If you do not validate your copy of PowerRIP, "PowerRIP" will print across your output. You do not need to validate the software on the PowerRIP client. PowerRIP 2000 must be launched to validate your copy. Go to the PowerRIP 2000 folder on your hard drive. Open the PowerRIP 2000 folder. Double click on the PowerRIP 2000 application icon. The PowerRIP 2000 Control Panel will display on the screen. Follow the steps below:

1. Pull down the **File** menu and select **Install Validation**. The PowerRIP 2000 validation dialog will display.
2. Write down your unique **User Code.** similar to this dialog.



Note: The User Code can change so previous User Codes may not be valid.

3. You will also need your **Product Code** which can be found on the Product ID card inside the software package.
4. To obtain your **Activation Code**, launch your web browser and enter
   http://www.iproofsystem.com
   Click Epson Printers on the iProof home page. In the top right corner of the Product information page click **Get and Activation Code**.
5. The Validation page will display. Select English as your language. The **Online Registration and Validation** window will display. Fill out the registration information and click **Submit Form**.
6. The Validation page will display. Click on Validate PowerRIP 2000 Enter your **Product Code** and **User Code** then click **Submit**.
7. Your **Activation Code** will appear on the next screen. Write down that code and quit your browser.
8. Enter the **Activation Code** in the PowerRIP 2000 Validation dialog Activation box and click **OK**.

Note: This Activation code can only be used with your present User Code. It can not be used with any other User Code.

PowerRIP 2000 is now Validated. If you pull down the PowerRIP 2000 File menu you will note that Install Validation is now grayed out and Remove Validation is active.

Note: *The Install Validation process allows up to five validations. When you install PowerRIP 2000 for the first time, and Install Validation, the number of available validations will be reset to four. When you Remove Validation, the counter is reset back to five. There is no limit to the amount of times you may Install Validation, providing you Remove Validation first. You may also check your remaining validations on the iProof Systems validation web page.*

If you do not remember to put your validation back in your WEB account when you do a remove validation you will loose that validation. If you loose all 5 of your validations and require addi - tional validation you will have to call the iProof System sales department for additional valida - tions. There will be a charge for the additional validations.

Remove Validation

You should Remove Validation before reformatting your hard drive, upgrading your operating system, or upgrading to a newer computer.

To Remove Validation follow the steps below:

1. Launch PowerRIP 2000.
2. Pull down the **File** menu and select **Remove Validation**.
3. A warning message appears: “You are about to remove validation. Are you sure you want to do this?” Click **OK**.
4. When you clicked **OK** in the previous step the Removal Code is displayed on your screen and a Simple Text document, **Removal.Code**, is placed in the PowerRIP 2000 folder. Double click to open this document.
4. Write down the removal code, launch your web browser and enter:
   http://www.iproofsystems.com/
   Click Epson Printers on the iProof home page. In the top right corner of the Product information page click **Get and Activation Code**.
6. The Validation page will display. Select English as your language. The **Online Registration and Validation** window will display. Fill out the registration information and click **Submit Form**.
7. The Validation page will display.
   Click on Remove a Validation. Enter your **Product Code** and **Remove Code** then click **Submit**.
   Your Validation has been put back in your validation web account.

Chapter 3 - Getting Started

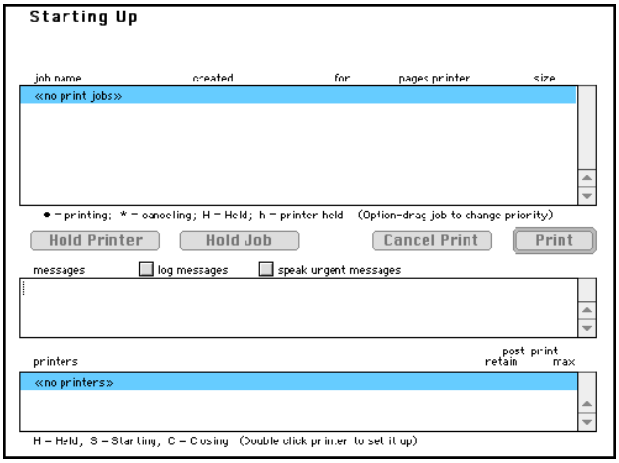
This chapter tells you how to launch PowerRIP 2000, create a PowerRIP 2000 printers, and select a PPD.

Launching PowerRIP 2000

Follow these steps:

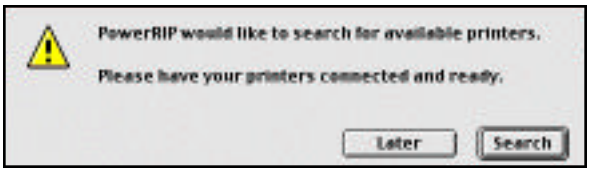
1. Make sure your printer(s) are connected to your Macintosh and the printer(s) are turned on. (See Chapter 5 for Connecting your Printer to your Macintosh).
2. Open the PowerRIP 2000 folder on your hard drive.
3. Make sure your Macintosh has the correct connection selected. (See Chapter 5 for Operating System Requirements.)
4. Double-click the **PowerRIP2000** icon.

5. The PowerRIP 2000 Control Panel dialog will start to display. *Note: This window is always open while PowerRIP 2000 is running. See the Chapter 7 for information about the Control Panel and its options.*



A dialog will display asking you to name your Message Log. It is wise to retain the name "Message Log" and save the log in your PowerRIP 2000 folder.
Click **Save**.

6. A dialog will display asking if you would like to search for available printers.



Click **Search**
Note: For further discussion on manually creating queues and Search for Printers see Creating Printer Queues, this chapter.

7. The Auto Queue Setup dialog will display. PowerRIP 2000 will search and find all printers with a direct connection and/or a network connection. Click **OK**.

Note: Search for Printers will occur automatically at initial install. After initial install Search for Printers can be executed from the PowerRIP 2000 Control Panel dialog. See Creating Printer Queues, this Chapter, for additional information on Search for Printers within the Control Panel dialog.

In you have one printer:
It is recommended that you save your printer queue folder to the desktop. If you have a single printer you can launch PowerRIP 2000 from the printer queue folder instead of the PowerRIP 2000 folder on your hard drive. Double clicking on the printer icon in the printer queue folder will launch PowerRIP 2000 and automatically open the printer queue.

If you have multiple printers:

A printer queue will be created for each printer that is selected in the dialog. If you do not want to create a printer queue for all the printers deselect those printers. To deselect click on the check box to remove the check.

Click **Save**.

After creating your printer queue(s) you need to select the appropriate PostScript Printer Description (PPD) for your printer. Continue with the next section Selecting a PPD. Then proceed to Chapter 4, Printing Using PowerRIP 2000.

Selecting a PPD

A PPD is a description of the characteristics of your printer. It is used by the PostScript driver and your application to identify these characteristics when you print.

Note: In the QuarkXPress Page Setup dialog, you must select a PPD from the Printer Description pull-down menu. The printer description will begin with iProof PowerRIP followed by the specific printer name.

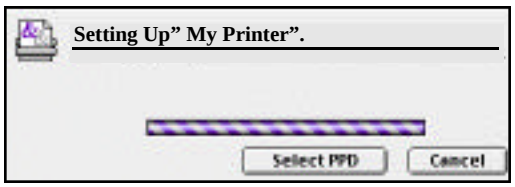
Never select third party PPDs. Always select the appropriate PPD for your printer that was installed by PowerRIP 2000. The PPDs can be found in System> Extensions>Printer Descriptions.

To Select a PPD follow the steps below:

Note: PowerRIP 2000 must be launched and the printer queue must be active to select a PPD when using LaserWriter 8.

1. Open the **Chooser** from the Apple Menu.
2. Select **LaserWriter 8**. Your printer appears on the right. **Highlight** it.

3. Click **Create**. The following dialog box appears:



If Desktop Printer Spooler is not enabled, or if you previously have created the Desktop Printer, the Create button in step 3 above is replaced by the Setup button. In that case click **Setup**.

Note: Menus and PPD selection may vary, depending upon your Macintosh OS and the version of LaserWriter 8 you are using.

4. Click Select PPD... A list of PPDs appears. (If you don't see the PPD for your printer, you may need to scroll through the list or select Other PPD.)
5. **Highlight** the PPD for your printer and click **Select**. If Desktop Printer Spooler is enabled a dia--log will display on the screen telling you a Desktop Printer is being built.
6. A dialog will display stating that you have changed your current printer. Click **OK**. Close the Chooser.

You have now created a printer queue and selected the PPD for your printer. Continue with Chapter 4, printing from PowerRIP 2000.

Note: Refer to the Read Me PDFs/Desktop Printers.pdf on the PowerRIP 2000 CD for detailed informa - tion on network printing and DeskTop Printers.

Creating Printer Queues

There are two methods which can be used to create your queue(s). You can create your queue manually or automatically with Search for Printers.

Search for Printers

Search for Printers will search and find all printers supported by PowerRIP 2000 with a direct connection and/or a network connection. All printers must have been turned on before Search for Printers occurs.

Note: Search for Printers will occur automatically at initial install. After initial install Search for Printers can be executed from the PowerRIP 2000 Control dialog.

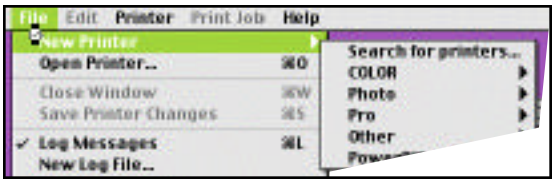
Search for Printers can be used with one printer connected to a USB port, printers connected via a network, or a combination of USB and network printers. The cable or network connection used will be defined in the queue name. If you have two of the same printer types it will define the first printer with the printer name, the second printer with the printer name and a 1 and so on.

Once you have created your printer queues with Search for Printers, in the future when launching PowerRIP 2000, all the printers will automatically open. But you must remember to turn your printers on before launching. If a printer is removed from the network or has not been turned on before PowerRIP 2000 is launched you

will get an error message to that effect and can skip that printer. Also if you close a printer using **Printers>Close Printer** in the PowerRIP Control dialog, the next time you launch PowerRIP 2000 the printers will not automatically open.

Using Search for Printers

Go to **File>New Printer>Search for Printers**. A search will commence.

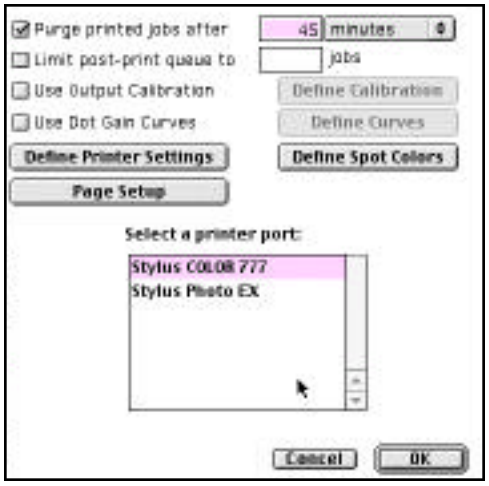


Follow step 7 page 9 to create your printer queues.

Manually Creating Printer Queues

To manually create a printer queue follow the steps below:

1. In the PowerRIP 2000 Control dialog go to **File>New Printer**
   Select the **sub menu for your printer**
   Select the **appropriate connection for your printer** i.e., USB, Serial Port,or LocalTalk/EtherTalk.
2. The Printer Setup dialog will display.



   You will see different dialogs for different connections. For an in-depth discussion of the Setup dialog features for your printer, see Chapter 7 Printer Setup. Click **OK**.
3. A dialog box will display allowing you to name your printer queue.

   Name your printer queue (or leave the default name) and select a location for the printer queue folder. A good location for the printer queue folder is in the PowerRIP 2000 folder. The name of the printer queue folder will have to “q” added to it, for example,”My Printer q.”

   Note:If you save the printer queue to the desktop you can launch PowerRIP 2000 from the queue folder instead of the PowerRIP 2000 folder on your hard drive. Double clicking on the printer icon in the queue folder will launch PowerRIP 2000 and automatically open the printer queue.

4. Click **Save**. The PowerRIP 2000 Control Panel displays the printer queue you just created at the bottom of the PowerRIP Control Panel dialog.

   You have completed creating the printer queue. You need to select the appropriate PostScript Printer Description (PPD) for your printer, page 10, and the proceed to Chapter 4, Printing Using PowerRIP 2000.

Printing from a Client Macintosh to a Windows NT Server

If you are printing from a Macintosh client to a Windows NT server you must use the Windows PPDs which are on the PowerRIP 2000 CD in the folder PPD>US. Manually insert the PPD(s) for your printer(s) into the Printer Descriptions folder of the System Folder>Extensions on your client Macintosh.

Networking Macintosh computers to Windows NT Server 4.0

Note: To print from a Macintosh client to a Windows PowerRIP 2000 server you must be running under Windows NT Server 4.0 with Services for Mac installed or Windows 2000 Professional.

1. Open the **Choose**r and select LaserWriter 8. The printer appears on the right. **Highlight** it. Click **Setup** or Create. Create will display the first time you go to the Chooser. Setup will display thereafter.
2. A LaserWriter dialog will display. Click **Select PPD**.
3. In the **Select a PostScript Printer Description file** dialog select the PPD that you copied from the PowerRIP 2000 PC PPD folder. Click **Select**. Close the Chooser.

You are now ready to print from your Macintosh applications to your PowerRIP 2000 on your server PC. For directions for printing from specific applications go to the Read Me PDF files on the PowerRIP 2000 CD.

Chapter 4 - Printing Using PowerRIP 2000

This chapter includes instructions for printing, cancelling, and deleting print jobs.

Printing from a Standalone or Server Macintosh

When you use PowerRIP 2000 to print from a standalone or server Macintosh, you are actually creating a PostScript file from your application, sending it to PowerRIP 2000 to be processed, and then send the processed file to your printer.

Note: Do not drop PostScript files in the System software Print Spooler or Print Monitor printer icon, on your desktop. Files must be spooled to the PowerRIP 2000 printer queue folder.

The PostScript files must be saved to the printer queue folder you created earlier. If you saved the PostScript file to a different destination, you can drag and drop the file into the proper printer queue folder. Do not save jobs to the Printed Jobs folder inside the printer queue; jobs reside there after they have printed.

If your Macintosh has sufficient memory, you can keep PowerRIP 2000 open in the background while you work in other applications. Your print job starts processing as soon as it gets to the printer queue.

If you don't have enough memory (your Macintosh will tell you whether or not you do), save your files to your printer queue folder, quit your application, and then launch PowerRIP 2000 and the printer (printer queue) to print.

Preparing PowerRIP 2000 to Print

Follow these steps:

1. Make sure that the correct PPD is selected in the Chooser using LaserWriter 8, and Setup. Also make sure you have the correct network selected. (See Chapter 5 for network and cable connection information.)
2. Open the PowerRIP 2000 folder on your hard drive and double-click the PowerRIP 2000 icon to launch the application and open the PowerRIP 2000 Control Panel.

Note: If you saved your printer queue folder on the desktop, open the printer queue folder, double click on the printer icon.

Your printer(s) will automatically open.

If you close your printers manually in the PowerRIP 2000 Control dialog using **Printer>Close Printer** before you Quit PowerRIP 2000 you will have to manually open your printers the next time you launch PowerRIP 2000.

To manually open Printers:

1. From the File menu, select **Open Printe**r.
2. Select your printer queue folder (you may need to navigate to it) and click **Open**.
3. Select your printer and click **Open**.

Printing from Your Application

Printing from PowerRIP2000

On the PowerRIP 2000 CD, there is a folder called Read Me PDFs. This folder contains Read Me files that will walk you through printing from most major applications using the LaserWriter 8 and AdobePS8 drivers. Drag the Read Me file you wish to print, to the PowerRIP 2000 printer queue folder. The Read Me will process and print.

Print Menu Options

Most applications have printer dialog boxes that allow you to select the printing options for your printer. These options are usually accessed through the Printer Specific Options in the printer dialog pull-down box. For an in-depth discussion of the Printer Specific Options please see Chapter 8.

Note: See the PageMaker Read Me in Read Me PDFs *for Options when printing from PageMaker.*

Cancelling a Print Job

In PowerRIP 2000, cancelling stops the current job from printing, and puts it in the Completed Jobs folder. To cancel the current print job, click the Cancel Print button in the center of the PowerRIP 2000 Control Panel, then click Yes.

When you cancel a job you will get a Interrupt Error in the PowerRIP 2000 Control Panel message window, this is normal.

Cancelled print jobs go into the Completed Jobs folder and can be printed at a later time. To do this, select Show Completed Jobs under the Printer pull-down menu at the top of the screen. Select the print job and click the Reprint Job button. The job will reappear in

the Control Panel job queue, process and print. If you want to delete the print job, follow the steps in the next section, “Deleting a Print Job.”

If there are other print jobs besides the current job that you don’t want to print, follow the steps in the next section, “Deleting a Print Job.”

Deleting a Print Job

Deleting a print job removes it from the queue folder and Completed Jobs folder. Follow these steps:

1. In the PowerRIP 2000 Control Panel, select the print job you want to delete.
2. From the Print Job menu, select Remove job. Your print job is deleted from the print queue folder. You may also delete a job from the queue or Completed Jobs folder by highlighting it and pressing ⌘k.

Chapter 5 - PowerRIP 2000 System Requirements

Chapter 5 includes system requirements for all supported printers and information for connecting your printer to your Macintosh.

Standalone/Print Server Macintosh RAM and Disk Space Requirements

Printers	RAM	Disk Space
Epson Stylus Color, Color II, IIs, 500, 600, 680, 740, 760, 777, 800, 850, 860, 880, 900, 980, 1160, 1500, 1520, 3000, C60, C62, C70, C80, C82 Epson Stylus Pro, Pro XL, Pro XL+, 5000, 5500 Epson Stylus Photo, Photo EX, EX3, 700, 750, 780, 790, 810, 820, 825, 830, 870, 875, 890, 915, 925, 960, 950,960, 1200, 1270, 1280, 1290, 2000, 2100, 2200	Minimum: At least 64 MB of RAM Preferred: 128 MB of RAM	At least 200 MB (approximately 24 MB required for a Custom Install).
Epson Stylus Scan 2000, 2500,CX3100, CX3200, CX5200 Epson Stylus Pro 7000, 7500, 7600, 9000, 9500, 9600, 10000, 1000CF	Minimum: At least 256 MB of RAM Preferred: 512 MB of RAM	At least 2 GB

Operating System Requirements

Printers	Operating System	CD-ROM	AppleTalk Network
Epson (Stand alone or Print Server Mac)	OS 8.1 or later. (OS 9 or later supported.)	Required	AppleTalk network connection required if Server Mac

Client Macintosh

RAM and Disk Space Requirements

Printers	RAM	Disk Space
Epson Stylus Color, Color II, IIs, 500, 600, 680, 740, 760, 777, 800, 850, 860, 880, 900, 980, 1160, 1500, 1520, 3000, C60, C62, C70, C80, C82 Epson Stylus Pro, Pro XL, Pro XL+, 5000, 5500 Epson Stylus Photo, Photo EX, EX3, 700, 750, 780, 790, 810, 820, 825, 830, 870, 875, 890, 915, 925, 960, 950,960, 1200, 1270, 1280, 1290, 2000, 2100, 2200 Epson Stylus Scan 2000, 2500,CX3100, CX3200, CX5200	At least 64MB of RAM	N/A
Epson Stylus Pro 7000, 7500, 7600, 9000, 9500, 9600, 10000, 1000CF	At least 96 MB of RAM	N/A

Operating System Requirements

Printers	Operating System	CD-ROM	AppleTalk Network
Epson (Client Mac)	OS 8.1 or later. (OS 9 or later supported.)	Required	AppleTalk network connection with the PowerRIPserver

Connecting Your Printer to Your Macintosh

Printer	Printer Dependent Interfaces Supported
Epson printers	**Serial connection** Use printer port or modem port. If you use the modem port your modem software must be disabled. *Note: If you are cable connected via the printer or modem port choose your printer model and Serial Port, when creating a new printer.* **Optional LocalTalk, EtherTalk Interface card, orAXIS 1440 print server -** Follow the instructions in the printer and interface manuals for installing, connecting, and naming your printer. *Note: If you have an Ethernet or LocalTalk interface or a AXIS or Jet Direct print server, choose your printer model and LocalTalk/EtherTalk when creating your new printer.* **USB to Parallel adapter -** If your printer does not have a USB port. *Note: The Epson Stylus Color, Pro, ProXL, Color 500, and Stylus 1500 do not support USB to Parallel.* *If you are cable connected via USB, which includes USB to Parallel adapter, choose your printer model and USB when you create a new printer.*

Chapter 6 - Color Matching

ColorSync Support

Color Matching information of PowerRIP 2000 version 6.0.8 or later

ICC profiles are color space definitions. The ICC profile format is defined by the **I**nternational **C**olor **C**onsortium as a cross platform standard. The ability to cross platform allows you to print from the Macintosh to the PC, or the PC to the Macintosh. ICC compliant applications, such as Photoshop, Illustrator, QuarkXPress, have the capacity to output using ColorSync 3.0.4 or later. PowerRIP 2000 can print using ColorSync from any ICC compliant application.

PowerRIP 2000 version 6.0.8 or later always uses ICC profiles for all it's color management. ColorSync 3.0.4 or later muse be active in your Operating System's Control Panel.

When PowerRIP 2000 version 6.0.8 or later is installed it will automatically install all the ICC profiles, for the printer you are installing if you install a single printer or for all the printers if you do a full install, in the **autodestination** folder. The autodestination folder can be found in the **Profiles** folder which is in the **PowerRIP** folder on your hard drive.

PANTONE™ Color Support for the Stylus Pro and Pro XL

The Pantone Matching System (PMS) is the most commonly used of all the ink mixing systems. PowerRIP 2000 is Pantone certified for the EPSON Stylus Pro, and Pro XL and Pro XL+.

For all other printers, using a PANTONE™-licensed application, you can define a new spot color by adding the name of the Pantone color in the Edit Color portion of the application. The word Pantone must be in initial caps, a space, the number of the color, a space, and the appropriate extension i.e., Pantone 7449 CVU. You must also make sure that you select CMYK as the color model and define the color as a spot color. Do not define the percentage of CMYK.

You can also create your own special named colors in LAB, RGB, or CMYK color spaces using Define Spot Color.

When printing using named spot colors you must select separations in the Print dialog and Make Composite from Separations in Printer Specific Options. This feature can only be used with applications that have the ability to select separations in the Print dialog. If you are using an application that required your selecting separations in Printer Specific Options then this application can not create Composites from Separations.

The Pantone files for the EPSON Pro, Pro XL, and Pro XL+ are included with PowerRIP 2000. These files can be read directly into all PANTONE-licensed applications so you can have printer calibrated versions of all Pantone colors. The colors are calibrated to use PowerRIP 2000's stochastic screens, PressProof and EPSON's papers.

For installation instructions, refer to the Read Me First file, Pantone Documentation, and Pantone Manual in the Pantone folder on the PowerRIP 2000 CD.

Using Your Own Custom ICC Profiles

In the Profiles folder in your PowerRIP 2000, version 6.0.8 or later, folder you will find a **Source** and **Destination** folder. If you have created a calibrated monitor profile then it should be put in the Source folder. It can then be accessed in the **RGB Source Profiles** or **CMYK Source Profiles** pull-down in Printer Preference when printing.

Your customized printer (ICC) profiles should be saved in the Destination folder. These customized profiles will allow you to override the automatic destination profile selection installed with PowerRIP 2000. Your customized (CMYK Destination Profiles) should match the printers paper types and resolution parameters.

After the profiles are installed in the appropriate folders and before the profiles are available for printing, PowerRIP 2000 must be restarted and the appropriate printer must be opened in the PowerRIP Control panel. This causes the PPD in the System Folder/Extensions/Printer Descriptions to be updated. **The updated profile should be distributed to all clients using the server**

Define Spot Color

Inks in color printing fall into two categories: process color and spot color. The process inks are **C**yan **M**agenta **Y**ellow **K** Black (CMYK). Spot color inks can be virtually any color. The most widely used spot color system being the Pantone Matching System. Spot colors are special premixed colors that require their own separations.
Process colors and spot colors may appear on the same page. Spot color is generally used when a particular color match must occur, such as a company logo or product brochure. If you print your spot colors as a process separation the color might not be an accurate color match. The named color will be converted to a percentage of CMYK, which means you no longer can guarantee the color match.

Spot colors are special premixed inks with specified CMYK equivalents instead of process (CMYK) color inks. Define Spot Color allows you to print spot colors so that they are not converted to process color when printed. If you print your spot colors without using Define Spot Color, all your spot colors will print as process color. Define Spot Color can also be used to redefine a color if you find that the names color you have chosen does not meet your specific color needs.

Create your file and select the named colors you wish to print. Then using Define Spot Color, you can define the spot colors in PowerRIP 2000 to assure that they will not be printed as process spot colors. If you are going to use the same spot colors with many files, it would be wise to create a printer queue specifically for your spot color output. For this discussion we will create a new printer specifically for the spot colors.

Defining your Spot Color in PowerRIP 2000

1. Launch PowerRIP 2000.
2. Create a new printer queue. (See page 11 for creating a new printer)
   The **Setup** dialog will display. Select a realistic time for **Purge Printer Jobs After** and a realistic number for **Limit Post-print Queue to**.
3. Click **Define Spot Colors**. The Main Setup dia log will display.
   Select **Yes** to Make Composites from Separations.
   Select **Force Printer Settings**.
   Click **OK**.
4. Click **OK** to close the Setup dialog.
5. Save your printer with a name that defines it as your spot color queue.

Printing using Define Spot Color

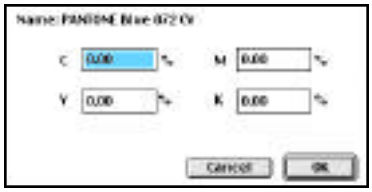
When you print your file that contains the spot colors you will select print as separations in your application. But since you will be printing this file to your spot color printer queue and it is setup to make composites from separations the following will occur:

1. The application will spool the separations to PowerRIP 2000 spot color queue. PowerRIP 2000 will start to build the composite from the separations. As it is processing the first spot color the following dialog will display:
   Click **Yes**.
2. The **Add Spot Color** dialog will display.

Define the percentage of C, M, Y, and K for the spot color. Click **OK**. The next spot color will display. Repeat steps 2 & 3 for each spot color.

Note: After you have finished printing your spot colors using your spot color queue you must remember to go back to your previous printer queue. If you use your spot color queue for your normal printing all

future output will be printed in black and white. If you want to use your spot color queue for all your printing then you will have to go to Define Printer Setting and deselect Force Printer Setting and click Reset Defaults.



Calibration

PowerRIP 2000 has the ability to adjust color using either Output Calibration and/or Dot Gain Curves. This gives the user the ability to increase or decrease the color intensity. The user can adjust all colors or each color individually. There is a folder on the PowerRIP 2000 CD called Read Me PDFs. This folder contains a Calibration Read Me file in PDF format. Refer to the Calibration Read Me for in-depth instructions on its use.

DOT GAIN Control is the best tool for inkjet users. Calibration was designed for imagesetter users.

Chapter 7 - Printer Setup Dialogs/Control Panel Options

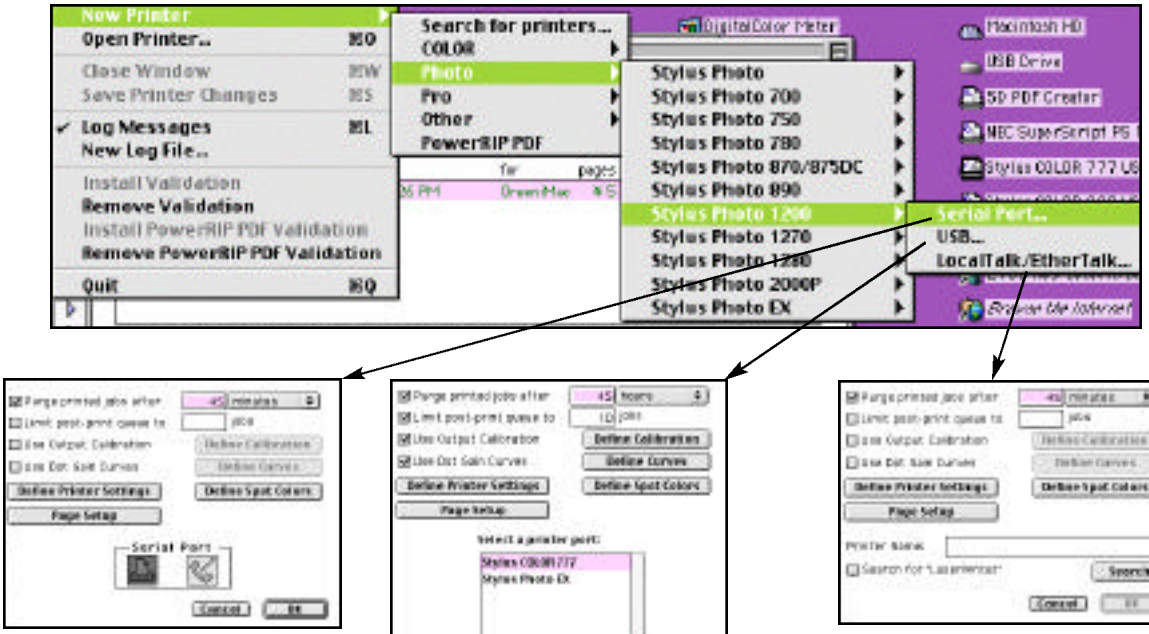
Note: The features discussed in Chapter 7 are dependent on your printer and version of PowerRIP 2000. Not all features are available on all printers or on all revisions of PowerRIP 2000.

PowerRIP 2000 Files

When you installed PowerRIP 2000, files, folders, and subfolders were copied to the PowerRIP 2000 folder you specified. Never remove or modify these files.

Printer Setup (Epson Printers)

When you created your PowerRIP 2000 printer queue for your printer, a Setup dialog will display. The setup dialog varies depending on the printer you are using and how you are cable connected to that printer. (See page 11 for creating printer queues.)



Serial Port Setup

Make sure the serial (printer or modem) port your printer is connected to is selected.

USB Setup

Lists the printers on-line via USB. If more than one printer appears in the list, select the one your are creating a Queue for.

AppleTalk Setup

If you have installed Ethertalk via Jet Direct Print Server, Axis 1440 Print Server, or an optional LocalTalk card in your printer and selected New Print, LocalTalk/ Ethertalk should be selected. The Setup screen will display the Printer Name box. Search will automatically enter the proper name in this box.

Search

Click this button to search for your printer's network name. Never change the name the Search has found.

Search for 'LaserWriter'

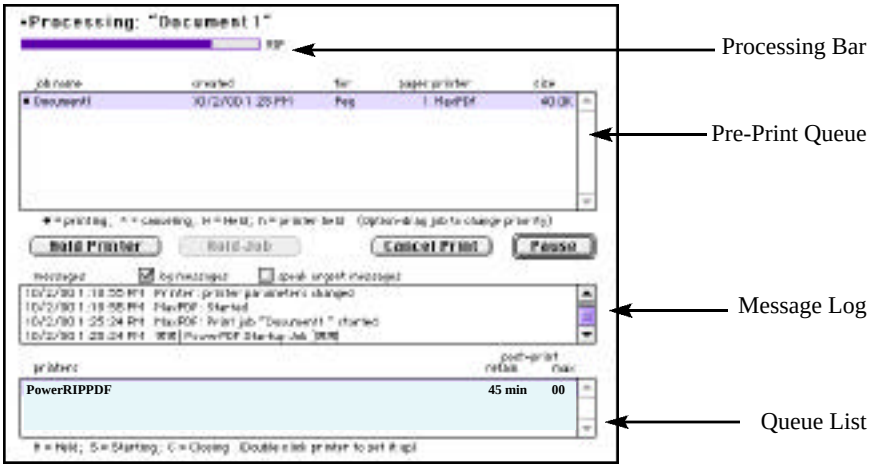
If Search does not find the printer connection, check this button and click Search again.

Printer Setup (All Printers)

Purge printed jobs after	When checked, jobs are deleted from the Printed Files subfolder for this PowerRIP 2000 printer after the specified number of seconds, minutes, hours, days, or weeks. When not checked, there is no time limit on jobs already printed.
Limit post-print queue to	When checked, the oldest jobs are removed from the Printed Files subfolder for this PowerRIP 2000 printer when the specified number of jobs is exceeded. When not checked, there is no maximum number of jobs already printed.
Use Output Calibration	Recommended only for use with imagesetters. This control does the works in reverse. If you want to add you must put in a lower value. It is used to build straight line curves based on percent dot. Click this button to access the Define Calibration menu.
Use Dot Gain Curves	Recommended for ease of use. Allows you to increase or decrease color intensity of all colors or any of the CMYK channels you want to modify. Click this button to access the Define Curves menu.
Define Spot Colors	Gives you the ability to output spot colors in any color or combination of colors you define. Click this button to access the Define Spot Colors menu. (See Chapter 6 Matching for Define Spot Color directions.)
Define Printer Settings	When you click the Define Printer Settings button the Main dialog will display allowing you to make changes to Printer Specific Options previously selected. If "Force Printer Settings" is checked, this feature gives you the ability to override the printing options embedded in a PostScript file. You can reprint a low resolution PostScript file from the Completed Jobs folder at a higher resolution. Select the new printing options you desire, Click "Force Printer Setting" and click OK. You can also create multiple queues for the same printer specifying your desired printing options for each; eliminating the need to select the options in your print menu. A complete list of the individual settings can be found in Chapter 8. **Reset to Defaults** - Clicking this button causes the printing options to be reset back to the default setting whether Force Printer Settings is checked or not.
Page Setup	Allows you to change the paper size and the paper type (printer dependent) of a previously printed file, if Force Printer Settings is selected.

PowerRIP 2000 Control Panel

The PowerRIP 2000 Control Panel, shown below, is displayed when you launch PowerRIP 2000.



Pre-Print Queue

The pre-print queue list is the large window in the top of the PowerRIP 2000 Control Panel window. When files are in the queue each line in the list is a print job for an open printer and includes the following information:

job status	This is a single character in the far left column of the list. H the job is held h the printer is held F the job failed • the job is currently processing * the job is currently being cancelled blank the job is ready to print
job name	This is the name of the original job, not necessarily the name of the PostScript file you created.
created	This is the date and time that the job was created.
for	This is the name of the user who created the print job.
printer	This is the name of the PowerRIP 2000 printer on which the job will be printed.
pages	This is the number of pages in the job. If no page count is specified in the job, the page count starts at 1 and increments as each page of the job is processed.
size	This is size of the job.

Jobs that are not held are printed in the order in which they appear in the list. To modify this order, hold down the option key and drag a job up or down to a new position in the list.

Printer Control Buttons

Hold Printer/ Release Printer	This button is a shortcut for the Hold Printer and Release Printer commands in the Printer menu. When the printer selected in the Printer List is held, this button changes to Release Printer. The currently printing job will not be held.
Hold Job/ Release Job	This button is a shortcut for the Hold Job and Release Job commands in the Print Job menu. When the job selected in the Pre-Print Queue is held, this button changes to Release Job.
Cancel Job	This button is a shortcut for the Cancel Job command in the Print Job menu.
Print	This button is a shortcut for the Print Job, Pause Printing, and Resume Printing commands in the Print Job menu. When the job selected in the Pre-Print Queue is printing, this button changes to Pause; when the selected job is paused, this button changes to Resume. Double-clicking on a job in the Pre-Print Queue or selecting a job and typing Return or Enter is identical to clicking on this button.

Message Log

Message logs are files created by PowerRIP 2000 for reviewing RIP activities such as printing times, error messages, etc. These message logs can be opened in a word processing application. You will need a word processor to open the logs if they get too large. To create a new message log select New Log file in the PowerRIP 2000 File menu.

Messages	This displays all informational and error messages generated by PowerRIP 2000 since its launch.
Log Messages	This check box is a shortcut for the Log Messages command in the File menu.
Speak Urgent Message	This check box is visible only when optional speech recognition software is installed on the PowerRIP 2000 server. When checked, critical warning messages written to the Message Log View are also spoken. This is useful if you wish to be informed of status when not sitting at the PowerRIP 2000 server.

Queue List

The Printers list is the window in the bottom of the PowerRIP 2000 Control Panel window. Each open printer is displayed in this window. When there is no character to the left of the printer name, the printer is ready to print. The following characters can appear at the left of the printer name.

H the printer is held
S the printer is starting up
C the printer is closing

Note: *Double-clicking on a printer name in the Printers list is a shortcut for the Setup Printer command in the Printer menu.*

Chapter 8 - Printer Specific Options

Printer Specify Options Epson Only version 6.0.8

Option	Settings	Description
Resolution	Printer's Default *(360 dpi),* 360 dpi, 720 dpi, 1440 dpi, 2880 dpi. *Note: Resolution is printer depen - dent.*	Resolution of printed images is measured in Resolution of printed images is measured in dots per inch (DPI) and represents the amount of detail that can be shown. The higher the number, the finer the resolution. Lower resolutions print faster and use less ink. *Note: Resolution is paper type and printer dependent.*
Paper Type	Plain Paper, Photo Quality Paper, High Quality Paper, Glossy Paper, Glossy Film, Press Proof 2, Double Weight Matte Paper (Roll), Synthetic Paper,Watercolor Paper, Glossy Paper (Roll), Premium Glossy Photo Paper (Roll), Semigloss Photo Paper (Roll), and many more.	Select the paper type you are printing on. PowerRIP 2000's Color Rendering Dictionaries (CRDs) are based upon the printers special paper stocks. These CRDs produce the maximum output quality on the selected paper. Paper type is, printer and resolution dependent *Caution: Using other brands of paper will result in inferior out - put quality.*
RGB Source	Document Defined, RIP Default, Normal, Apple 13RGB Stand,Apple Multi Scan 17 plus many more.	Display profiles for monitors. These profiles describe the characteristics and color gamuts enabling the CMS to convert between a monitor's native color space and a device-independent reference color space.
RGB Color Appearance	Prepress Proof Photographic	Prepress Proof should be selected if you are using your inkjet printer as a prepress proofer. The RGB data will be converted to CMYK data using the selection you choose in CMYK Source. Photographic should be selected to produce the greatest color gamut possible for the RGB colors and should be used to create the most accurate RGB representation possible on an inkjet printer.
CMYK Source	Document Defined, RIP Default, Japan S,SWOP, Euro LWCP Less than 70g, Euro Mat Paper above 70g, Euro Gloss Paper Above 70g. Euro uncoated white offset, TOYO	Output profiles for devices such as printers and printing presses. Also know as destination profiles. PowerRIP 2000's Color Management System uses these profiles so that the output on your printer is representative of the color qualities you can expect if your job is printed on an offset press.
CMYK Color Appearance	Color Management No Color Management	Select Color Management if you want the PowerRIP color management to be used. Select No Color Management if you do not want to use PowerRIP color management but want to use the applications color management or if you are running CMYK color calibration targets to make your own printer ICCs.

Printer Specify Options - Supported by PowerRIP 2000 version 6.0.8

Option	Settings	Description
Printer Profile	Auto Selection or a custom profile	Use Auto Select to print using the ICC Printer profiles installed by PowerRIP or select a customized profile.
Rendering Intent	Default Rendering Intent, Perceptual,Relative Saturation, Relative Colorimetric, Absolute Colorimetric.	A Color Management Module feature. Perceptual is used mainly for Photos to fit the gamut of the original within the gamut of the printer, Saturated will boost colors. Absolute will most accurately repesent colors fitting within the gamut, however colors outside the gamut will NOT be adjusted. Relative is a cross between Perceptual and Absolute.
True Spot Color	No or Yes	Select when using a named spot color or a user defined spot color. Allows users to customize spot color output.
Make Composites from Separations	No or Yes	Allows you to print composite proofs directly from color separated (DCS) output files.
Generate Pure Black	No or Yes	If Yes is selected blacks will print directly from the black ink cartridge. If No is selected blacks will be created using C, M, and Y. *Note: Selecting Yes may have adverse effects on halftones.* *Note: Some applications such as QuarkXPress do not preserve pure black in gradients.*
Screening	Stochastic Always Application's Default	Stochastic Screening is a random dot pattern that produces more tones and has more detail than fixed screen rulings.
Print Direction	Unidirectional Bi-directional	Can be set to Unidirectional or Bi-directional. Bi-directional, or high speed mode, is faster and does not significantly decreased print quality.
Cache to Disk Before Printing	Yes or No	Cache to Disk Before Printing requires a large amount of free contiguous hard drive space on your startup drive. This feature should be used when printing very large posters (up to 20 ft long) on the large format printers. Cache to Disk Before Printing precesses the file, saves the file to disk, and prints one continuous output stream. After printing is finished the cache file is automatically removed from the hard disk.
Force Printer Settings	Checked or not checked	If settings are **forced** all files sent to this printer will have these settings. If **not checked** it is PPD controlled

Printer Specify Options PowerRIP PDF Only

Option	Description
Resolution	The available resolutions are 72, 144, 288, 300, 600, 1200, and 2400 dpi. It should be noted that selecting a higher resolution can significantly increase the PDF file size.
ASCII Format	ASCII Format allows you to save files in ASCII format but it should be noted that the ASCII Format will create a slightly larger file.
Auto-Rotate	Auto-Rotate rotates a file from portrait to landscape.
Compressed PDF	Compressed PDF compresses document such as books and manuals to create a smaller PDF file. The appropriate compression method is one that creates the smallest PDF as possible, with the highest possible quality.
Create Thumbnails	Thumbnails are very small page representations that aid the user in navigating through multi-page documents, and provide an easy method for moving and copying pages within a document.
Preserve Halftone Info	Select Preserve Halftone Information when you want to retain the halftone (screening) information.
Device Dependent Color	Select Device Dependent Color to use the PowerRIP PDF color corrected information when creating PDFs.
Convert CMYK Images to RGB	Select Convert CMYK Images to RGB if you want RGB images when the PDF is created.
Transfer Function	**Remove** will remove the curves in the file when making the PDF. When the PDF is opened in Acrobat the change in the file can be seen on the screen. **Apply** will use the curves in the file when making the PDF. When the PDF is opened in Acrobat the change in the file can be seen on the screen. **Preserve** uses the curves in the file when making the PDF. When the PDF is opened in Acrobat the no change in the file can be seen on the screen.
Under Color Removal (UCR)	**Remove** removes UCR when creating the PDF. **Preserve** retains the UCR information when creating the PDF.
Sub-Sample Images	If you select **None** no sub-sampling will occur. Subsample reduces the amount of data in the image to no more than what the PDF needs. **Average** averages the pixels and replaces them with the average pixel color at the specified resolution.
Sub-Sample Resolution	Resolution should be defined when using Average in Sub-Sample Images. Select the lowest resolution possible. Selecting a high resolution will greatly increase the time it takes to process and print the file. The available resolutions are 72, 100, 150, 200, and 300 dpi (Dots Per Inch).

Printer Specify Options PowerRIP PDF Only (Cont)

Option	Description
Compress Images	If you select **None** no compression will occur. **JPEG** compression creates a much smaller file size because it eliminates data. JPEG compression can affect image quality. **ZIP** compression does not remove data to reduce the file size so it does not affect the image quality.
Preserve OPI Comments	Preserve OPI Comments retains the information needed to replace the FPO (For Placement Only) image with a high resolution image located on a server that supports OPI.
Preserve Overprinting Settings	Preserve Overprinting Settings retains the overprint settings in the file being converted to a PDF.
Embed All Fonts	Select Yes to Embed All Fonts if you want all the fonts in your system, embedded in the PDF.

Chapter 9 - PowerRIP PDF

PowerRIP PDF is the ideal utility for creating high quality, platform independent PDFs. You can take advantage of all your applications, various features and attributes, combined with the feature intensive PowerRIP PDF, giving you complete flexibility to create PDFs that meet your particular needs. These PDFs being small in size and platform independent can be viewed on both the Macintosh or PC, can be used as e-mail attachments, or web site documents.

Adobe Acrobat Reader 3.0 or later should be installed on your system to so that Auto Open can occur after the PDF is created. Acrobat 4.0 recommended.

PowerRIP PDF Queue

When you launched PowerRIP 2000 for the first time and did a Search for Printers a PowerRIP PDF queue was created. If you choose not to create a PowerRIP PDF queue at initial install then you need to create a queue before using PowerRIP PDF.

To create a PowerRIP PDF queue launch PowerRIP 2000. In the PowerRIP Control dialog go to **File>New Printer>PowerRIP PDF**. The PowerRIP PDF Setup dialog will display.

If you created a PowerRIP PDF queue at initial install launch PowerRIP 2000. Double click on PowerRIP PDF in the Printers portion of the PowerRIP Control dialog. The PowerRIP PDF Setup dialog will display.

PowerRIP PDF Setup Dialog

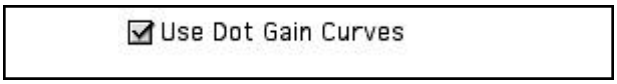
Select the features that will meet your PDF needs. The features are as follows:

When **Purge printed jobs after** is selected, PDFs are deleted from the PDF folder after the specified number of seconds, minutes, hours, days, or weeks. When not checked there is no time limit on the jobs in the folder. ***Select how long you want to keep your PDFs.***

When **Limit post-print queue to** is selected, the oldest PDFs are removed from the PDF folder when the specified number of jobs is exceeded. When not checked, there is no maximum number of PDFs saved. ***Select the number of PDFs, you want to save.***

Use Output Calibration allows you to increase or decrease color intensity of all colors or any of the CMYK channels you want to modify. Click this button to access Define Calibration.

Note: For a complete discussion of calibration read the Calibration Read Me which can be found in the PowerRIP PDF folder.



Use Dot Gain Curve is recommended for use only with a densitometer. Click Use Dot Gain Curves to access the Define Curves menu.

Note: For a complete discussion of Dot Gain Curve read he Calibration Read Me which can be found in the PowerRIP PDF folder.

When you click the **Define Printer Settings** the PowerRIP PDF Printer Settings dialog will display.

This dialog allowing you to make changes to Printer Specific Options previously selected. If "Force Printer Settings" is checked, this feature gives you the ability to override the options embedded in the file. You can recreate a low resolution file from the Completed Jobs folder at a higher resolution. Select the new options you desire, Click "Force Printer Setting" and click OK. You can also create multiple queues specifying your desired options for each; eliminating the need to select the options in your print menu. A complete list of the individual settings can be found in Chapter 8 - Printer Specific Options.

Page Setup allows you to change the paper size and the paper type (printer dependent) of a previously printed file, if Force Printer Settings is selected.

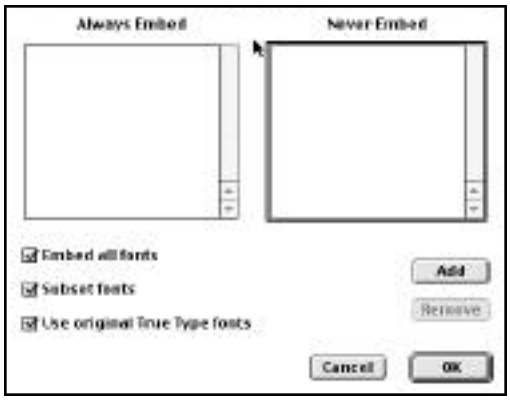
Job Name+.PPD creates the PDF using the job name. **File Name+.PPD** creates the PDF using the name of the file. **User Defined** should be selected if you want to type a new file name for the PDF.

Select **Prompt User** if the file or job already exists in your PDF folder.
Select **Overwrite Existing File** if the file or job name already exists in your PDF folder. The new file or job of the same name will overwrite the previous file.
Select **Auto Rename** if the file or job name already exists in the PDF folder. The PDF will be saved with a number added to the name. (Example: ticket#2.PDF)

Click **Change Output Folder** to create a folder for your PDFs and queue. *You should create a folder to hold all your PDFs. Click* ***Change Output Folder****. The* ***Select a Folder*** *dialog will display. Navigate to where you want the new folder saved. Click* ***New Folder****. The Name of new folder dialog will display. Give your new folder a name. Click* ***Create****. (For this exercise the new folder is called PDFs.) The* ***Select a Folder*** *dialog will redisplay. On the bottom of this dialog you will see* ***Select PDFs*** *Click Select PDFs. The name you gave your folder will replace PDFs which is the name we gave the folder for this exercise. The PowerRIP PDF Setup dialog will redisplay. You will notice that in the box under Output Folder your new folder has been selected.*

If you select **Auto Open Generated** PDF the PDF will automatically be opened in Acrobat as soon as PowerRIP PDF is finished creating the PDF file. You must have Acrobat installed on your system for this function to be available.

Click **Font Embedding** if you want to embed fonts with the PDF. The Font Embedding dialog will display.



When you select **Embed all fonts**, all the fonts on your system are embedded in the PDF when it is created.

Select **Subset Fonts** if you have created a list of fonts in Always Embed. The subset you have created will always be embedded in the PDF, when it is created.

To create a subset of fonts select **Subset fonts**. Click on the **Always Embed** portion of the display to make it active. Click **Add**. The **Add Font** dialog will display. Type the name of the font. Click **OK**. You will see the font name in the Always Embed window. To delete a font from this list highlight the font and click **Remove**.

If you select **Use Original TrueType fonts**, True Type fonts will be embedded as Type 42 PostScript fonts regardless if you have TrueType substitution turned on or off.

If you select **Never Embed** the subset of fonts you create will never be embedded in the PDF. To create a subset of fonts to never embed select **Subset fonts**. Click on the **Never Embed** portion of the display to make it active. Click **Add**. The **Add Font** dialog will display. Type the name of the font. Click **OK**. You will see the font name in the Never Embed window. To delete a font from this list highlight the font

Click **OK** to exit Font Embedding.
Click **OK** to exit the PowerRIP PDF Setup dialog if you are editing an existing queue. If you are creating your queue a window will display asking you to name the queue. The queue will be saved in the folder we made when we did Change Output Folder.

Selecting a PPD

A PPD is a description of the characteristics of your PowerRIP PDF. It is used by the PostScript driver and your application to identify these characteristics when you create a PDF

Never select third party PPDs. Always select PowerRIP PDF PPD that was installed by PowerRIP PDF. The PowerPDF.PPD can be found in System>Extensions> Printer Descriptions.

To Select PowerPDF.PPD follow the steps below:

Note: PowerRIP 2000 must be launched and the PDF queue must be active to select the PPD when using LaserWriter 8.

1. Open the **Chooser** from the Apple Menu.
2. Select **LaserWriter 8**. Your PDF Queue appears on the right. **Highlight** it.
3. Click **Create**.
   The first time you select the PPD it will say Create. If the Desktop Print, Spooler is not enabled, or if you previously have created the Desktop Printer Create is replaced by the Setup button. In that case click **Setup**.
4. Click Select PPD. A list of PPDs appears. (If you don't see the PowerPDF.PPD, you may need to scroll through the list or select Other PPD.)
5. **Highlight** PowerPDF.PPD and click **Select**. If Desktop Printer Spooler is enabled a dialog will display on the screen telling you a Desktop Printer is being built.
6. A dialog will display stating that you have changed your current printer. Click **OK**. Close the Chooser.

You have created or edited a PDF queue and selected the PPD. You are now ready to create PDFs.

Creating PDFs from within Applications

You can create a PDF from within your application by simply selecting PowerRIP PDF PPD which will give you all of the PowerRIP PDF features right within the application Print dialog. For this discussion a PDF will be created in QuarkXPress 4.x, PageMaker 6.5, and Photoshop 5.x. These three applications will give you the understanding necessary to create PDFs from within all your applications.

Creating a PDF in QuarkXPress 4.x

Note:It is assumed that your QuarkXPress file is on the screen and ready to create a PDF.

1. Select the PowerRIP PDF PPD in the Chooser.
2. Go to **File>Page Setup**. The Quark Print dialog will display.
   Setup tab

   Select **PowerRIPPDF** in Printer Description.
   Select the correct **Paper Size** and **Page Positioning**.
   Select the pages you want included in the PDF.

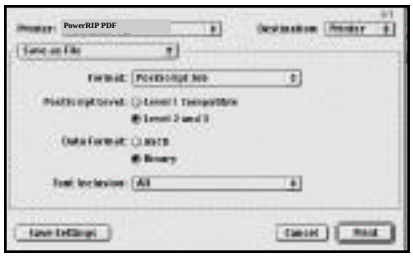
Document tab

Deselect **Include Blank Pages**.

3. Click **Page Setup** in the bottom left corner of the Print dialog.

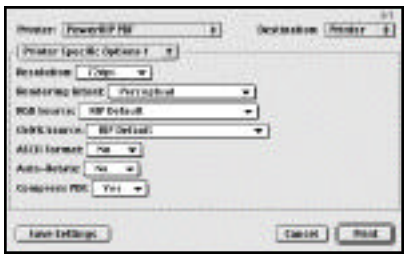
The LaserWriter Page Setup dialog will display.
Page Attributes
Select the correct orientation and scaling.
Click **OK**. The Quark Print dialog will redisplay.

4. Click **Printer** in the bottom left corner of the Quark Print dialog.
5. The LaserWriter Print dialog will display.
Save as File



Select **Level 2 and 3** in PostScript Level, **Binary** in Data Format, and **ALL** in Font Inclusion

Printer Specific Options 1
Select the applicable Options.
Note:See Chapter 8 - Printer Specific Options this manual for complete descriptions of all the available options.



Printer Specific Options 2
Select the applicable Options.

Printer Specific Options 3
Select the applicable Options.

Click **Print**.
Click **Print**.

If you had selected Auto Open Generated PDF in the PowerRIP PDF Setup dialog, PowerRIP PDF will process the file, create the PDF, save it in your PDF folder and automatically launch Acrobat and display the PDF. If you did not select Auto Open Generated PDF you can go to your PDF folder and click on the PDF to launch Acrobat and open the PDF.

Creating a PDF in PageMaker 6.5

Note:It is assumed that your PageMaker file is on the screen and ready to create a PDF.

1. Select the PowerRIP PDF PPD in the Chooser.
2. Go to **File>Print**. The **Print Document** dialog will display. Make sure that the correct PPD is selected in PPD.

3. Click **Features**.
The **Print Features** dialog will display.

Note: This is a scrollable window.
Select the applicable Features. *(See Chapter 8 - Printer Specific Options this manual for complete descriptions of all the available options.*

4. Click **Color**
   The **Print Color** dialog will display. Make sure **Composite** and **Color** are selected.
   Click **Print**

If you had selected Auto Open Generated PDF in the PowerRIPPDF Setup dialog, PowerRIP PDF will process the file, create the PDF, save it in your PDF folder and automatically launch Acrobat and display the PDF. If you did not select Auto Open Generated PDF you can go to your PDF folder and click on the PDF to launch Acrobat and open the PDF.

Creating a PDF in Photoshop 5.x

Note:It is assumed that your Photoshop file is on the screen and ready to create a PDF.

1. Select the PowerRIP PDF PPD in the Chooser.
2. Go to **File>Print**. The LaserWriter Print dialog will display.

   Note:See Chapter 8 - Printer Specific Options this manual for complete descriptions of all the available options.

   Printer Specific Options 1
   Select the applicable Options.

Printer Specific Options 2
Select the applicable Options.

Printer Specific Options 3
Select the applicable Options.

Click **Print**.
Click **Print**.

If you had selected Auto Open Generated PDF in the PowerRIP PDF Setup dialog, PowerRIP PDF will process the file, create PDF, save it in your PDF folder and automatically launch Acrobat and display the PDF. If you did not select Auto Open Generated PDF you can go to your PDF folder and click on it to launch Acrobat and open the PDF.

Chapter 10 - Troubleshooting

Note: The features discussed in Chapter 10 are dependent on your printer and version of PowerRIP 2000. Not all features are available on all printers or on all revisions of PowerRIP 2000.

This troubleshooting guide lists possible solutions for common problems. Please refer to the troubleshooting hints before calling technical support. When calling for technical assistance, be ready to identify your system and its configuration, the product code of PowerRIP 2000, and a description of the problems you are encountering. It is highly recommended that you enable the Log Messages option when creating a PowerRIP 2000 printer. The entries in the log will help the support staff to identify PostScript error messages.

Note: On PowerRIP 2000 CD there is a folder called Read Me PDFs. This folder contains in-depth Error Messages and Frequently Asked Questions (FAQ) Read Me's.

Troubleshooting Hints

This section includes the most common situations PowerRIP 2000 users encounter. Each problem includes several possible solutions.

Problem	Solution
Demo prints across your page	• PowerRIP 2000 has not been validated. See Validating PowerRIP 2000 instructions on page 8.
Out of Memory, Memory Low, and VM Error Messages	• Install additional memory. • Turn Virtual Memory On. Refer to Macintosh Help or your Apple documentation.
Font not found: using Helvetica; Findfont errors	• In your application's Print Menu when selecting Save as File, you should select "All" in the Font Inclusion pull-down menu. • Select Always download needed fonts under the General pull-down in your application's print menu. • Are you allowing Font Substitution in your page setups? If so, turn Font Substitution off. • Make sure you have PostScript-compatible printer fonts rather than just screen fonts. If you do not have PostScript-compatible printer fonts loaded on your system, you cannot print them. • Make sure your fonts are available to the system. In order to be available, fonts must be placed in the Fonts subfolder inside the System Folder. No other subfolder should be placed within the main font subfolder. If your font library is too extensive to be placed in the Fonts subfolder, you might consider purchasing Suitcase™ a font handling utility. • Open the Preferences subfolder inside the System Folder and delete the PowerRIP™ Preferences file. A new preference file is automatically created when you restart PowerRIP 2000.
Images on printed pages are clipping	• Consider the printable image area of your printer. You may need to increase your margins or decrease the size of your image.

Troubleshooting Hints (Cont)

Problem	Solution
Images on printed pages are clipping (Cont)	• Make sure you selected the proper PPD in the Chooser Setup.
Printer out of synch – outputting repeated pages of extraneous code	• If Cancel Job or Hold Printer have no effect, turn off your printer to avoid wasting paper. • Force Quit the PowerRIP 2000 application. Do this by holding down the option and command keys and then pressing the escape key to Force Quit. You must then reboot your Macintosh to re-establish communication with the printer.
Printer cannot be opened/printer not found/problem with printer	• Make sure the printer is powered on. • Make sure the printer is connected properly to the PowerRIP 2000 server. Defective cables are a common problem. Try a different cable. • If you are using an EtherTalk interface via HP Jet Direct Print Server, make sure you did not alter the name of the interface that the Search recorded. • If you are connected via USB or USB to Parallel ensure that you have an Epson USB driver active in your System Folder/ Extensions. USB drivers for Epson printers are available on the web at www.Epson.com. An Epson USB driver is not necessary with Macintosh OS 9's USB Driver Extension. • If you are using EPSON's optional LocalTalk or EtherTalk interface card, or an Epson AXIS 1400 Print Server, make sure you did not alter the name of the interface that the Search recorded.
Job in pre-print queue not printed	• Make sure the PowerRIP 2000 printer is not held, starting up, or closing. • Make sure the job is set up to print to the correct PowerRIP 2000 printer. • Make sure the printer is connected properly to the Macintosh. • Make sure the Epson printer is ready and the Pause light is off.
Job does not appear in pre-print queue	• Make sure the PowerRIP 2000 printer for the job is open. • Make sure the job was placed in the proper queue. When creating a PostScript file, you must save it to the printer queue folder you set up. If you saved it to another location, you can drag it into the proper print queue folder. • Make sure the correct printer has been selected in the Chooser on the client Macintosh. • Make sure both the PowerRIP2000 server and client are on the same network.
Job prints in black and white or one or more colors are missing	• Make sure you specified color output in your application's print dialog.

Troubleshooting Hints (Cont)

Problem	Solution
Job prints in black and white or one or more colors are missing (Cont)	• Check the color ink cartridge. If the cartridge is empty, replace the cartridge according to the instructions in your printer documentation.
Job just printed not in post-print queue	• If you specified a purge time of 0 in the Printer Setup dialog for the PowerRIP 2000 printer, the job is purged as soon as it finishes printing. If you want to keep printed jobs, change the purge time. • If you specified a maximum job count of 0 in the Printer Setup dialog for the PowerRIP 2000 printer, no jobs are saved after they are printed. If you want to keep printed jobs, change the maximum job count.
Client times out while sending job to PowerRIP 2000	• Did you switch to another application on the PowerRIP 2000 server? If you did, the other application may not give PowerRIP 2000 enough time to maintain its connection with the client. Switch back to PowerRIP 2000 and try printing again. • Is PowerRIP 2000 running on a slower Macintosh computer, and are there several clients trying to print to PowerRIP 2000 simultaneously? Your server may not be fast enough to support a large number of simultaneous transfers. Wait for some of the clients to completely send their jobs to PowerRIP 2000, then try again. • Instead of printing directly to the server Macintosh select Save in the client's Print Menu. Save the PostScript file on the client Macintosh and manually drag it to the server's print queue.
Rendering stopped or slower than normal	• Increase PowerRIP 2000's memory allotment. To do this quit PowerRIP 2000, highlight the PowerRIP 2000 icon, under the File menu select Get Info/Memory. Change Preferred Size to a greater number, keeping in mind the total amount of RAM you have, the RAM requirements of your operating system and all applications you might have active at any one time. • On slower Macintosh computers, transfer operations may require most of the available memory; therefore, rendering during transfers slows down considerably. Make sure multiple clients do not send jobs at the same time. • Make sure all PowerRIP 2000 dialog boxes are closed. If they are open, and waiting for a reply, rendering is suspended until the dialog is closed.

Glossary

Absolute	A rendering intent where colors match exactly with no Colorimetric adjustment made for white point or black point that would alter the image's brightness.
AdobePS™	A printer driver used by an application to create a driver PostScript file. This driver is distributed by Adobe and may be used as a substitute for a LaserWriter driver.
Calibration	The process of setting a device, such as a monitor or printer, to known color conditions.
Color space	A particular variant of a color model with a specific gamut or range of colors which is one of its chief characteristics.
CMM	Color Management Module. This software component in a CMS does the color conversion calculations from one device's color space to another's.
CMS	Color Management System. This is a tool that maps, or translates the color space of one device to the color space of another. ColorSync on the Macintosh and ICM on Windows are examples of CMSs.
ColorSync	A system-level CMS developed by Apple Computer for the Macintosh OS.
FPU	Floating Point Unit. A chip capable of executing operations with real numbers. The FPU may be built-in (MC 68040 or PPC 601) or available as an add-on to the main CPU (MC 68881).
framing	The process by which a complete raster image of a page is created in memory before it is output to an imaging device. If the available memory is sufficient, then PowerRIP 2000 will frame a page. Since disk spooling of bands is unnecessary, framing is usually faster than banding.
ICC	The International Color Consortium. A group of industry vendors that have agreed to a standard color matching system for device profiles, color management system architecture, and components.
imaging device	A device capable of printing a raster image on a physical medium, for example, a printer, or imagesetter.
interpreter	A set of software functions to convert PostScript language commands into a raster image.
job	A file containing PostScript language operators and operands residing in a Jobs folder and listed in either the Pre-Print Queue or the Post-Print Queue.
LaserWriter™	A printer driver distributed by Apple Computer and used by an application to create a PostScript file describing the visible contents of a document.
Message Log	A scrolling text view in the PowerRIP 2000 control panel containing all logged messages.
network	EtherTalk or AppleTalk cabling and required software to link Macintosh computers to each other, or in the case of PowerRIP 2000, to link the clients to the server.

Perceptual	A rendering intent which compresses the total gamut from one device's color space when one or more of the colors in the original image is out of the gamut of the destination color space.
Post-print queue	A scrolling list in the PowerRIP 2000 Completed Jobs window containing all jobs already printed for all open PowerRIP 2000 printers.
PostScript	An interpretive programming language developed by Adobe that describes the text, graphics, and image content of a document.
PowerRIP 2000 client	A Macintosh computer on which the user runs most applications. The user may print from these applications to an imaging device attached to a PowerRIP 2000 server.
PowerRIP 2000	The main window of the PowerRIP 2000 application containing Control Panel the control but tons, Pre-Print Queue, the message log view, and the printer list.
PowerRIP 2000 printer	A virtual imaging device representing a physical imaging device with a user-selectable set of characteristics. Each PowerRIP 2000 printer has a separate jobs folder. The names of all open PowerRIP 2000 printers appear as LaserWriter devices in the Chooser dialog opened on a PowerRIP client.
PowerRIP2000 queue	A file representing a PowerRIP 2000 printer residing in the Jobs file folder for that queue
PowerRIP 2000 server	A Macintosh computer running the PowerRIP 2000 application which networked client computers print to.
Pre-Print Queue	A scrolling list in the PowerRIP 2000 Control Panel Window containing the job currently printing and all jobs yet to be printed for all open PowerRIP2000 printers.
Printer List	A scrolling list in the PowerRIP 2000 Control Panel Window containing all open PowerRIP 2000 printers.
Printer Setup	A dialog box in which you select options for a PowerRIP 2000 dialog box printer.
PSPrinter™ driver	A printer driver used by an application to create a PostScript file. This driver is distributed by Adobe and may be installed as a substitute for a LaserWriter driver.
queue folder	A folder containing a PowerRIP 2000 printer file and all jobs for that printer. Jobs to be printed are in the Jobs folder; jobs already printed are in the Printed Files subfolder.
raster image	A bitmap representing an interpreted PostScript page to be output to an imaging device. For each device pixel on the page, there is a corresponding color in the color space appropriate for the imaging device.
Relative Colorimetric	When a color in the current color space is out of gamut in the target color space, it is mapped to the closest possible color of the target color space while colors that are in gamut are not affected.
render	The process by which PostScript language commands are interpreted and a raster image is produced.

Rendering intent	The method a CMM uses for converting colors from one device's gamut to another.
RIP	Raster Image Processor. An application or device that renders PostScript language inputs and outputs the resulting raster image to an imaging device.
SWOP	Standard Web Offset Publication. The color matching standard that all printing presses and proofing systems in the United States are based upon.
TIFF	Tagged Image File Format. A standard image file format.
White Point	How the color white is reproduced. On a monitor it is the combination of Red, Green, and Blue phosphors at full intensity. Necessary as a reference point in calibration.

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